

# ACHIEVING QUALITY IN DISTANCE LEARNING

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## Introduction

Distance learning provides training and educational opportunities to military personnel who must be available to deploy anytime and anywhere. Distance learning is an adjunct to traditional educational delivery that offers a proliferation of choices. Course content can be packaged and distributed more efficiently to a wider audience and in a variety of geographic locations, and information can be tailored to meet the needs of individual learners.

## Army Distance Learning

The significant force and resource reductions following the Cold War and Persian Gulf conflict precipitated a re-evaluation of the Army's training management system. The Army was supporting deployments worldwide, with an increasing reliance on Reserve components. To meet training challenges, the Army is implementing a distance learning system consisting of a network of information architectures and linkages to support individuals, schools, and units. There are four primary distance-learning initiatives: the Army Distance Learning Program (ADLP), Classroom XXI (CRXXI), the Army Doctrine and Training Digital Library (ADTDL), and the Army University Access Online.

In April 1996, the Army Distance Learning Plan was published. The objective of the plan was to increase and sustain force and unit readiness by offering a broad range of training options for unit operational needs and individual soldiers.

In 1999, the distance learning program was examined for ways to improve training, enhance readiness, and support the Army transformation. The ADLP, in collaboration with the

National Guard Bureau's Distributive Training Technology Project and the U.S. Army Reserve Education and Learning Program, will provide standardized training and educational opportunities to soldiers and civilians anytime and anywhere by exploiting current and emerging distance learning technologies.

CRXXI focuses on leveraging technology to use information in a variety of ways to increase the Army's war-fighting capability. ADTDL, the information foundation for CRXXI, provides an interactive library for trainers, training and combat developers, resource managers, and Active and Reserve component soldiers worldwide.

In July 2000, Secretary of the Army Louis Caldera introduced Army University Access Online. The subsequent contract awarded in December 2000 will provide distance education to an estimated 80,000 soldiers during the next 5 years. This initiative prepares information age-savvy soldiers for the digital challenges of the 21st century and enhances recruiting incentives for young adults who may otherwise be inclined to move directly from high school to post-secondary education. Online education offers soldiers an opportunity to serve the Nation while achieving their personal educational goals.

## Technologies

Distance learning is defined in many ways, but all the definitions focus on the use of technology to support innovations in teaching and learning. Technology is not a substitute for solid teaching but rather a tool for helping teachers teach and for helping students learn. There are a significant number of technologies available for the delivery of distance learning, and

selecting the medium is an important part of the efficiency and effectiveness of the course. The chart on Page 47 depicts the evolutionary development of distance learning technologies.

## High-Quality Standards

Distance learning has a viable role in assisting the Army achieve its training and educational objectives; however, ensuring high-quality standards is paramount. Distance learning must be concerned with legitimacy and accountability, hence it is important to differentiate between quality assessment and quality assurance. Quality assessment systems are tools or mechanisms (such as examinations) that assess program outcomes. Quality assurance systems are concerned with creating and maintaining conditions by which students can achieve the desired outcome.

## Classroom Comparison

Is technology-assisted distance learning as effective as traditional face-to-face classroom instruction? Thomas L. Russell, author of *The No Significant Difference Phenomenon*, compiled a summary of 355 research reports, summaries, and papers written between 1928-1998. Russell concluded that there is no significant difference in the effectiveness of the two media.

A similar review of distance education studies released by The Institute for Higher Education Policy suggests that existing research leaves too many questions unanswered or inconclusive. Its 1999 report entitled *What's the Difference?* examined the written material published during the 1990s. The report provided three broad implications on the proliferation of distance learning in the areas of quality of the access, technological replacement of the human factor, and focus on learner characteristics and student motivation rather than on technology.

Good distance teaching practices are fundamentally the same as good traditional teaching practices, focusing on the way in which information is communicated to a student and the manner in which the student learns the material and constructs new knowledge from the information presented.

The following discusses two characteristics of the learner that should be considered.

*Cognitive Considerations Of The Learner.* Cognitive learning styles of an

Timeframe	Media	Communication Features
1800s to 1960	<ul style="list-style-type: none"> <li>• Print (1800s)</li> <li>• Radio (1930s)</li> <li>• Television (1950s/1960s)</li> </ul>	<ul style="list-style-type: none"> <li>• Primarily one-way communication</li> <li>• Interaction between student and faculty by telephone and mail</li> </ul>
1960 to 1985	<ul style="list-style-type: none"> <li>• Audio/video cassettes</li> <li>• Television</li> <li>• Fax</li> <li>• Print</li> </ul>	<ul style="list-style-type: none"> <li>• Primarily one-way communication</li> <li>• Interaction between faculty and student by phone, fax, and mail</li> <li>• Occasional face-to-face meetings</li> </ul>
1985 to 1995	<ul style="list-style-type: none"> <li>• E-mail/chat sessions/bulletin boards</li> <li>• Computer/CDs/Internet</li> <li>• Audio/video conferencing</li> <li>• Fax</li> <li>• Print</li> </ul>	<ul style="list-style-type: none"> <li>• Broadband communications from faculty to student via print, computer, and videoconferencing</li> <li>• Two-way interactive capabilities for asynchronous and synchronous communication</li> <li>• Internet for text/graphics/video snippets</li> </ul>
1995 to 2005 (est.)	<ul style="list-style-type: none"> <li>• E-mail/chat sessions/bulletin boards</li> <li>• Computer/CDs/Internet</li> <li>• Audioconferencing</li> <li>• Fax</li> <li>• Print</li> </ul>	<ul style="list-style-type: none"> <li>• Two-way interactive real-time audio and video</li> <li>• Asynchronous and synchronous communications</li> <li>• Digital video transmission with databases available via Internet and World Wide Web</li> </ul>

### *Evolution of distance learning activities*

individual include the predispositions of perceiving, remembering, organizing, processing, thinking, and problem solving. To optimize these characteristics, instructional design and development considerations should include the following:

- Analyzing the cognitive characteristics of students and matching the cognitive styles to the instructional content;
- Maintaining supportive online assistance;
- Aligning teaching style and instructional materials to the various cognitive styles of students; and
- Assessing what the students learned in the areas of knowledge, comprehension, application, analysis, synthesis, and evaluation.

*Psychological Considerations Of The Learner:* Motivation is an important psychological element that refers to factors regulating an individual's readiness or commitment to expend energy on a particular task at a particular time. In the traditional classroom setting, it is natural to engage in learning activities. Conversely, distance learning is usually in a different physical environment such as home, where television or children playing may be a distraction, and where there is a lower degree of social motivation. However, the learning experience can be positive because students learn without fear of being embarrassed in a classroom.

Another important psychological factor is the organization of learning. In a traditional classroom environment, learning occurs at a scheduled time, duration, and location and focuses on specific subject matter—all of which provide a degree of rigidity. In a distance learning environment, learners engage in learning activities at their convenience, for the most part, and the material can be reviewed repeatedly until the information is understood rather than going at the pace of the teacher and classmates.

### **Guidelines For Success**

Media is the vehicle that delivers instruction, but it is the content of the vehicle that influences achievement. The materials should present the content in ways that make it understandable for learners of widely differing ability, background and knowledge, and previous experience. The key to improving learning is determined by how effectively a medium is exploited in the teaching-learning situation. Effective distance learning can take place by applying five important criteria: provide courses that are interactive, provide courses that allow for reflection and practice, provide courses that offer variety in presentation, provide course material that is relevant, and provide course information that is accurate and appropriate.

The Institute for Higher Education Policy published a report in March 2000 entitled *Quality On the Line: Benchmarks for Success in Internet-Based Distance Education*. The report

examined the public debate on the merits of Internet-based learning and provided tangible measures of quality in distance learning, identifying 24 benchmarks within 7 categories: institutional support, course development, teaching and learning benchmarks, course structure, student support, faculty support, and evaluation and assessment.

The Regional Accrediting Commissions, which ensure the quality of most degree-granting institutions of higher learning in the United States, also drafted guidelines for the evaluation of electronically offered degree and certificate programs. Its guidelines are divided into five components: institutional context and commitment, curriculum and instruction, faculty support, student support, and evaluation and assessment.

### **Conclusion**

Distance learning provides access to training and education for a greater audience because course content can be packaged and distributed more efficiently. There is no single "best way" to deliver distance learning simply because learning is an individual process. Student success in a distance learning environment is largely dependent on the individual's cognitive and psychological characteristics. No medium in and of itself will improve learning in a significant way. However, the key to improving learning is determined by how effectively a medium or delivery technology is exploited in the teaching-learning situation.

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